

Massachusetts Food System Plan: Phase I Report

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By:

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Table of Contents

1. Introduction	1
2. Project Scope	3
3. Tasks and Deliverables	5
A. Task 1. Project Management and Communications	5
Project Management	5
Communications	6
B. Task 2. Advisory and Working Groups	7
Project Advisors	7
Working Groups	9
Table 1. MFSP Working Groups	10
C. Task 3. Stakeholder Engagement	10
Table 2. Major Outreach Events: Completed and Planned	11
Table 3. Targeted Additional Outreach: Completed and Planned	13
D. Task 4. Data Research, Analysis and Mapping	14
Spatial Analysis	15
Literature Review	16
Research	16
4. Phase II: At a Glance	18
5. Summary	20
Table 4. Phase I Budget	20
Table 5. Initial Estimated Project Timeline	21
Appendices List	I

1. INTRODUCTION

The Commonwealth of Massachusetts is engaged in an exciting effort to develop its first comprehensive food system plan since 1974. In August, 2013, the Massachusetts Department of Agricultural Resources (MDAR) released a Request for Proposals (RFP) on behalf of the Massachusetts Food Policy Council (MFPC), seeking consultants to facilitate the development of this plan. The MFPC is a 17-member entity comprising state agency, legislative, and industry representatives, established by the Legislature and Governor in November, 2010 (MLG Chapter 20 Section 6C).

The RFP indicated that the planning process would involve “a process for stakeholder and agency involvement, an estimated timeline, a draft budget, and a general framework for goals and objectives that will improve Massachusetts’ agricultural economy, enhance the resiliency of the Commonwealth’s food system, and improve the nutritional health of the state’s population.” Consistent with the MFPC’s legislative mandate, the plan will have a heavy, but not exclusive emphasis, on food production in the Commonwealth and the economic viability of the agricultural sector. See budget in Table 4 and estimated timeline in Table 5 below.

After a selection process, MFPC chose the Metropolitan Area Planning Council (MAPC) and three partnering organizations (Pioneer Valley Planning Commission, Franklin Regional Council of Governments, and Massachusetts Workforce Alliance) to facilitate the planning process and help to draft the plan.

The plan will develop goals and strategies to:

- 1) Increase production, sales and consumption of Massachusetts-grown foods;
- 2) Create jobs and economic opportunity in food and farming, and improve the wages and skills of food system workers;
- 3) Protect the land and water needed to produce food, maximize environmental benefits from agriculture, and ensure food safety; and
- 4) Reduce hunger and food insecurity, increase the availability of healthy food to all residents, and reduce food waste.

These strategies will include legislative, regulatory, and budgetary recommendations, especially but not exclusively on the state level, as well as actions that can be taken by the federal and local governments, the business community, community-based or non-profit institutions, and others to advance the goals of the plan. The plan will include indicators for measuring progress and create a web-based tool to share information and promote collaboration among stakeholders.

As the planning process proceeds, participants are asked to consider the issues they bring to the table through the lens of three over-arching questions:

- What steps can we take to grow the economic impact of Massachusetts’ farm and food enterprises?
- How can we increase access to fresh, healthful and affordable food, in ways that achieve greater equity along lines of race, class, and income?

- How can Massachusetts increase the ability of the food system to withstand stresses related to climate change?

To advise the planning team and to guide the development of the Food System Plan, the MFPC endorsed a group of Project Advisors comprising approximately 30 members representing a wide array of interests and expertise. The MFPC further appointed a smaller Executive Committee to meet more frequently and to provide the planning team with more timely oversight. Most members of the Executive Committee serve as the “lead” of one of the project’s Working Groups and subgroups, which have primary responsibility for developing the key findings and recommendations in the planning process.

The following is a list of Working Groups:

Food Access, Security, and Health
Inputs, Waste Management, and Nutrient Recovery
Processing
Production (including four subgroups: Farming, Fisheries, Land, and Urban Agriculture)
Wholesale and Retail Distribution

The planning process involves significant public engagement, including regional meetings, and interviews with key stakeholders. MAPC has subcontracted with two additional organizations (Fertile Ground and the Boston Collaborative for Food and Fitness) to assist with outreach and engagement for often under-represented groups.

The planning process also has a significant research component. Much of the research is focused on gathering and synthesizing existing data and analysis on food production, distribution, and needs in Massachusetts. Planning team members, with the assistance of several renowned research institutions in the Commonwealth, are supplementing existing analyses with additional research in several key topic areas.

The Massachusetts Food System planning process is generously funded by the Commonwealth of Massachusetts, the Kendall Foundation, the Merck Family Fund, the John Merck Fund, the Island Foundation, the Boston Foundation and the EOS Foundation.

This document includes a full report on the progress made in order to complete Phase I of the project.

Anyone interested in learning more about the planning process, contributing to the plan, or participating in this effort is encouraged to seek further information or to contact the planning team at www.mafoodplan.org.

2. PROJECT SCOPE

The planning team will develop a Massachusetts Food System Plan that recommends specific strategies to:

- Increase the share of food produced in Massachusetts for consumption within the state and elsewhere.
- Protect land, water and energy resources needed to produce food and reduce food waste.
- Increase the number jobs in the food sector and improve the wages and skills of the work force.
- Increase the availability of fresh, healthy food to all residents, especially those who are food insecure and/or suffering from poor nutrition.

These strategies will include legislative, regulatory, and budgetary recommendations, especially but not exclusively on the state level, as well as actions that can be taken by local government, the business community, community-based or non-profit institutions, and others to advance the goals of the plan. The plan will include indicators for measuring progress and create a web-based tool to share information and promote collaboration among stakeholders.

As the planning process proceeds, participants are asked to consider the issues they bring to the table through the lens of three over-arching questions:

1. What steps can we take to increase the contribution of the agricultural sector to the economy and prosperity of MA?
2. How can we increase access to fresh, healthful and affordable food, in ways that achieve greater equity along lines of race, class, and income?
3. How can Massachusetts increase the ability of the food system to withstand stresses related to climate change?

The MFPC has endorsed a Board of Project Advisors comprising approximately 30 members representing a wide array of interests and expertise to advise the planning team and guide the development of the plan. The MFPC further appointed a smaller Executive Committee to meet more frequently and to provide the planning team with more consistent oversight. Most members of the Executive Committee serve as the “lead” of one of the project’s five Working Groups, which have primary responsibility for developing the key findings and recommendations in the planning process. The following is a list of the five primary Working Groups:

1. Production
2. Processing
3. Wholesale and Retail Distribution
4. Food Access, Security, and Health
5. Inputs, Waste Management, and Nutrient Recovery

Since there is a heavy emphasis on local production, the Production Working Group has four sub-groups:

1. Farming
2. Urban Agriculture
3. Fisheries
4. Land Management

The planning process involves significant public engagement, including regional meetings, an academic conference, as well as visits to individuals and organizations with an interest in the food system. MAPC

has subcontracted with two additional organizations (Fertile Ground and the Boston Collaborative for Food and Fitness) to assist with outreach and engagement for traditionally under-represented groups.

The planning process also has a significant research component. Much of the research is focused on gathering and understanding the considerable volume of existing data and analysis on food production, distribution, and needs in Massachusetts.

3. TASKS AND DELIVERABLES

This section of the report provides details regarding each task, progress made, and deliverables submitted. A number of tasks such as project management and advisor/working group coordination will need to continue in Phase II.

A. TASK 1. PROJECT MANAGEMENT AND COMMUNICATIONS

This task included all work by MAPC on managing the project, as well as the full team's efforts on internal and external communications on the project. The primary goals of this task were to:

1. Ensure that there was open and effective communication between and among all project planners, consultants, Project Advisors and their Executive Committee, the MFPC, MDAR staff, Working Group members, and other key stakeholders.
2. Provide up-to-date and relevant information to all food system stakeholders and the general public.

PROJECT MANAGEMENT

Effective and efficient management of the MFSP project was critical due to the magnitude and scale of the planning work required. MAPC reached-out to New England food system planners who have shown success in developing food system plans to seek their guidance regarding the management and successful completion of such an all-encompassing planning process. MAPC and the planning team participated in the New England-wide State Food System Planning Community of Practice monthly conference calls, as well as continued participation in the Food Solutions New England Vision and associated annual Food System Summits. Shortly thereafter, MAPC developed a descriptive work plan for the full project that explains roles, responsibilities, and expectations for the planning team. This document also included the team's expectations for feedback and participation by consultants, MDAR, MFPC, and Project Advisors. The project work plan was intended to be a "living document," which would be reviewed and updated as the project advanced. Since there was so much energy and interest from organizations that wished to become more directly involved, MAPC also attempted to establish a transparent management and communications process that was inclusive of ideas and requests from both partner organizations, financial contributors, state agencies, and other stakeholders.

General project management responsibilities led by MAPC included the following:

1. Development of an initial Phase I scope of services and budget to accompany the contract with MDAR, on behalf of the Massachusetts Food Policy Council;
2. Development of subcontracts for the planning team and other contractors according to Massachusetts procurement regulations (MGL Section 30B);
3. Development of a proposal for the Phase II scope and budget¹;
4. Management of all MAPC-led and subcontractor-led tasks and submittal of deliverables itemized in the Phase I scope; and

¹ The Phase II contract and scope were executed on January 8, 2015.

5. Internal and external communications, as described in the communications subtask below.

COMMUNICATIONS

As indicated previously, open communication with all planners, partners, advisors and stakeholders regarding the project and its progress is essential. Regular communication with MDAR and the MFPC occurred regarding the project via telephone conversations and in-person meetings and emailed and written reports on progress. In addition, MAPC drafted a communications plan document that was folded into the project work plan, which outlined all strategies for both internal and external communications (included in the appendix). Generally, this document described various methods of communication between and among the planning team and consultants, MDAR, Project Advisors and Executors, Working Groups, stakeholders and the general public. A media strategy was also included to discuss ways of informing the public about the plan and how interested parties could become involved.

This communications plan included the following key elements:

1. Initial Project Webpage: While the long-term, interactive webpage was designed and developed, an initial page was created off of MAPC's website (www.mapc.org/mafoodplan) to ensure that project information was provided right away for stakeholder and other interested parties. This page was linked to both the MFPC and MDAR web pages, as well as Advisor organizations, so that interested parties could learn more about involved parties. MAPC has transferred information from this page to the long-term independent Massachusetts food system website.
2. Interactive Massachusetts Food Plan Website: MAPC developed an interactive website as an engagement tool during the planning process for the MFSP that will continue to serve as a forum for information sharing during plan implementation. The website features information about the MA Food System Plan and includes a discussion forum, photo stream, timeline of events and meetings, and an interactive food system mapping tool. Depending on specific needs and funding availability, some of these features may be changed and/or enhanced during the post-planning implementation phase.
3. Social Media: MAPC Communications Staff created and maintained a project Facebook page where event photos and feedback have regularly and easily been uploaded and collected. MAPC communications staff has also used Twitter.com to publicize each project event. The project Facebook page has 187 'likes'; the Twitter account has 63 followers. On both social media platforms, those connected to the project have broadened our reach by 'liking', 'sharing', 'retweeting', or in some other way interacting with our post. We fully recognize that there are several categories of food system stakeholders that will not utilize online or social media sites, and therefore, the team has utilized several other engagement tools, as described below.
4. Press Interaction: Several press articles were published as a result of MAPC's initial press release in May about the award of the contract, including four articles in The Change Agent; "Massachusetts Beginning Work on Updated Food Plan," Boston Herald, June 9, 2014; and "Serve Yourself," Edible Boston, Spring 2014. There have also been various articles in newsletters such as the Massachusetts Food Policy Alliance Newsletter.
5. Branding and Outreach Materials: In response to the requests from the MFPC for a project logo, MAPC sought a local design team: Red Sun Press (www.redsunpress.com), to develop branding materials such as a project logo, banner, and newsletter-type materials (included in the appendix). Rather than using MAPC's on-call contractor, selecting a local, smaller organization for this targeted work proved to be less costly. Three draft logos were circulated to the MFPC and MDAR to assist in selection of a final logo, as shown on the cover page.

6. **Project Outreach and Education:** As previously mentioned, there was tremendous public interest surrounding the project. MAPC and partner staff were often called upon to meet and present to stakeholder groups regarding the Plan.

It is important to note how popular the project became even immediately following the planning team selection in November 2013. Considerable effort was expended responding to inquiries or suggestions regarding the project from both internal (MDAR, MFPC, Advisors) and external parties. Since the contract date of March 1, 2014, MAPC and partner organizations have received over 400 such external inquiries (predominantly documented via email – examples provided in the appendix). Despite this volume, the project team has addressed approximately 95% of all inquiries to date via phone conversations, email responses, in-person interviews or meetings, as well as through the provision of project presentations. Response to these inquiries has taken approximately 10-12 hours per week, on average. Conversations that occurred in response to these inquiries frequently brought valuable perspectives to the project. In addition, there were numerous inquiries in which academic institutions offered pro-bono data collection and research efforts. The planning team was sure to prioritize research activities that would be most helpful in generating the MFSP, as further described under Task 4.

B. TASK 2. ADVISORY AND WORKING GROUPS

The project team was committed to establishing both a Project Advisory group and numerous, food sector topic-based Working Groups to develop goals, findings, and policy recommendations. Tasks associated with the establishment, coordination and interaction with each of these stakeholder groups are described in the sub-sections below.

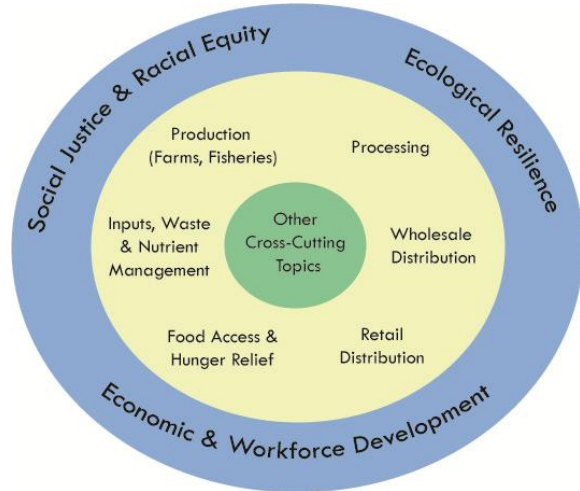
PROJECT ADVISORS

The Project Advisor group was designed to ensure that critical stakeholders and experts within the food system are engaged. Specifically, Project Advisors group was established to provide the following services:

- Provide the planning team with feedback and suggestions regarding the planning process;
- Assist with Working Group selection of goals for the Plan, and planning and policy recommendations within each food system sector;
- Assist the planning team in refining goal statements and policy recommendations, and the development of goals that cross all sectors;
- Represent constituents during development of the Food System Plan;
- Serve as content experts during Working Group sessions (i.e., “deep dives” into each food system sector); and
- Help coordinate implementation and Plan sustainability after project completion.

Three to four Advisor meetings were proposed to be held during Phase I, with a total of eight to nine Advisor meetings to be held throughout the duration of the entire 18-month project. Three Advisor meetings were held during Phase I (June, September and November of 2014), at geographically representative locations, with a telecommuting option made available.

An initial list of Project Advisors were selected with assistance of MDAR and the MFPC, to provide equitable representation from **all** food system sectors, as shown in the accompanying figure adapted



from the food system diagram used by the MFPC. The Project Advisors Group include individuals focused on farming, food policy, food security, public health, hunger and emergency food, workforce development, institutional food, land preservation, ecological protection, economic development, waste management and composting, as well as agricultural service organizations, nonprofit advocacy groups, and non-profit agricultural assistance programs; representatives from academia; as well as individuals from local, state, and federal agricultural agencies. The planning team generated this initial Advisor list based on positive relationships with numerous food system organizations and selected organizational

capacity to do the following:

1. Represent a broad-based of stakeholders within a particular food system sector;
2. Secure staff time to participate in the planning process in a meaningful way; and
3. Have the capacity to continue on as a leader for Plan implementation.

The initial Advisor list was refined and expanded. Particularly during the Advisor list revision, the planning team made sure to focus on racial diversity among both Advisor individuals and the constituency groups selected organizations represented. In addition, the planning team ensured that the farming and ranching community was given a strong voice within the Advisor group, as they serve as the fundamental element in the success of the system. Therefore, suggestions were sought from the Massachusetts Food Policy Alliance, MFPC Advisor Committee, and the Massachusetts Farm Bureau Federation.

An updated proposed Advisor list was created and submitted to the MFPC on May 20, 2014, which was conditionally approved subject to an understanding that the planning team will continue to seek additional representation from populations of color during the planning process. It should be noted that the team also informed the MFPC that the ebb-and-flow of the Advisor group will likely continue throughout the life of the project, which it has. There are a number of organizations that were initially involved that have not continued for one reason or another, typically due to a lack of resources or time available to participate. There are also a few new organizations added to the Advisor list that fill voids in representing constituents or critical subject matter such as land conservation, food access, and production (farming). The “final” yet evolving Advisor list is included in the Acknowledgements section or this document, and in the appendix.

Feedback from the first Advisor meeting in June 2014 included a majority request to have an Advisor-led discussion regarding policy priorities of Advisor organizations. MAPC included a space for these discussions within the September 2014 Advisor meeting agenda. The MFPC and Advisors requested that preliminary data analysis findings be presented at this meeting early to “fuel” the policy discussion. Although this required MAPC to prepare this information one to two months ahead of schedule, a preliminary baseline analysis for each food system sector was prepared, along with a detailed presentation of the data by MAPC’s Director of Data Services.

A number of Advisors requested that a formal Advisor Executive Committee (EC) be established to provide assistance to MAPC regarding process, communications, scope management and development of general goals for the Plan. Although this would require additional resources set-aside for managing this Committee, MAPC felt a Committee could be beneficial, particularly if the EC would take-on some work associated with leading the Working Groups (as further described below). Other management-related tasks that MAPC has asked the EC to assist with include leveraging additional resources needed due to the budget reduction², undertaking specific projects related to constituency outreach, and working more closely with the project team to ensure that planning tasks are completed within Phase II. MAPC presented a Memorandum on this subject to the MFPC on September 5, 2014. The establishment of a Committee, as well as a proposed additional reduction to MAPC's budget to reserve a modest amount of funding for requested stipends (approximately \$1,500 each - \$13,500 total), was unanimously approved by MFPC members at this meeting.

The first Executive Committee meeting was held in early November, 2014. EC members have requested that MAPC schedule and facilitate at least four EC meetings during Phase II, which is in addition to the meetings described above under the project management and communications task. (Note: We now expect roughly six such meetings due to the extension of the Phase II timeframe to the 12 months of calendar 2015.)

WORKING GROUPS

The Working Groups were initially proposed to provide the following important feedback and assistance:

1. To serve as the primary content experts regarding each food system sector;
2. To conduct "deep dives" into food system sector topics and discuss research needs or gaps with the planning team
3. To develop recommendations provided to Advisors and the planning team for Plan goals related to their specific category;
4. To prepare planning and policy recommendations regarding issues, challenges, and innovations within their food system sector.

A request was sent to Advisors shortly following their first meeting to help solidify categories and begin to populate the Working Group categories. The planning team's initial suggestion included six Working Groups that mirror the initial MFPC food system "wheel" categories shown above. However, after several conversations with Advisors, as well as a focus on Working Group topics during the September Advisor meeting, the planning team came to understand that some Groups should be consolidated and others expanded. Therefore, five primary Working Groups were suggested to the MFPC, with the Production Working Group having four sub-groups due to the critical prominence of local production within the planning process, as shown in the table below.

² Based on the RFP, MAPC's proposal was budgeted for \$350,000; however the contract was funded at \$315,000, or \$35,000 less than the proposal. This will be addressed in Phase II.

Table 1. MFSP Working Groups

	Working Group (and Subgroup)	Brief Description	Lead (s)	Staff Liaison
1.a	Production (Farming)	Livestock and poultry, dairy, vegetables, fruit, berries, egg, grains, maple, honey etc.	Brad Mitchell, Massachusetts Farm Bureau	Mary Praus, Franklin Regional Council of Governments
1.b	Production (Land Management)	Land availability and management (i.e. preservation restrictions, zoning/regulations)	Cris Coffin, American Farmland Trust	Mary Praus, Franklin Regional Council of Governments
1.c	Production (Urban Agriculture)	Land access, site remediation, production innovations, zoning	Ruth Goldman, Merck Family Fund; Pat Spence, Urban Farming Institute	Mary Praus, Franklin Regional Council of Governments
1.d	Production (Fisheries)	Fresh and salt water nearshore fishing, shellfishing, aquaculture, processing, and regulation.	Valerie Nelson, Water Alliance	<i>Pending</i>
2	Processing	Animal slaughter, bottling and packing facilities, commercial kitchens, food hubs.	Nico Lustig, Western Massachusetts Food Processing Center	Heidi Stucker, Metropolitan Area Planning Council
3	Wholesale/Retail Distribution	Movement of food products (i.e. transportation, warehousing, aggregation) and distribution	Jeff Cole, Federation of Massachusetts Farmers Markets	Alex Risley Schroeder, Massachusetts Workforce Alliance
4	Food Access, Security, Health	Affordability, hunger relief, cultural food availability, consumer ed., and nutrition	Jessica Del Rosario, Massachusetts Convergence	David Elvin, Pioneer Valley Planning Commission
5	Inputs, Waste Management, Nutrient Recovery	Water, soil, and energy preservation; agricultural needs (seeds and feeds), opportunities for organic waste reuse and renewable energy generation	Jenny Rushlow, Conservation Law Foundation; Lorenzo Macaluso, Center for EcoTechnology	Eric Hove, Metropolitan Area Planning Commission

Upon Advisor and MFPC approval in October 2014, the planning team established Working Group Leads, primarily comprising members of the Advisor Executive Committee. Members of the planning team will continue to coordinate Working Group efforts and assist Leads with Group establishment and meeting facilitation. For example, the team has prepared all initial Working Group contact lists, templates for keeping notes, issues/challenges summaries from the regional engagement process per category, and a template for Leads to use in facilitating Working Group meetings. Most Working Groups held (or planned) their first meeting by the end of December 2014, and will continue to meet three to four times through April/May 2015 in order to recommend goals and objectives, findings, and planning and policy recommendations for Advisors and the planning team to review and incorporate into the Plan.

C. TASK 3. STAKEHOLDER ENGAGEMENT

It was important for the planning team to focus a sizeable portion of its resources toward building a constituency base for the MFSP, since this type of statewide effort has not been undertaken since 1974.

The Food System Plan would lack the momentum required to ensure that strategies are relevant across all stakeholder groups, and subsequently duly implemented, without meaningful involvement of a broad range of individuals and organizations. PVPC led the task of creating a thorough stakeholder engagement program aimed at building a constituency for the Plan and establishing a long-term vision for the Massachusetts food system (included in the appendix). It should be noted that this particular task, similar to the coordination of the Advisor and Working Groups, must continue throughout the life of the project. Therefore, although a good portion of the stakeholder engagement plan was completed during the foundation-building of the planning process (Phase I), several subtasks must continue on into Phase II.

The engagement program built on a foundation of existing relationships and partnership efforts to engage key food system organizations across the state. This enabled the planning team, with assistance from MDAR, to focus on developing and implementing a series of initial regional forums aimed at discussing planning elements within the context of a geographic identity. Each regional area of Massachusetts holds its own distinctive attributes within the food system in terms of the type of local production occurring within the area and/or food system issues and opportunities that are unique to this area. The original engagement plan included six regional forums to be held within primary regions of Massachusetts, with assistance from our sister Regional Planning Agencies, as shown in the table below.

Table 2. Major Outreach Events: Completed and Planned

Region	Date	Location	Local Partner	RPA Sponsor
Southeast MA	10/6/14	New Bedford	Southeastern Massachusetts Food Security Network	Southeast Regional Planning and Economic Development, Old Colony Planning Council
Greater Boston	10/11/14	Boston	MDAR, Trust for Public Land, BCFF, Food Sol, Haley House Bakery Café, Real Food Challenge	MAPC
Central MA	10/15/14	Worcester	MDAR, Worcester Food and Active Living Policy Council	Central Massachusetts Regional Planning Commission, Montachusett Regional Planning Commission
Northeast MA	10/22/14	Lawrence	Groundwork Lawrence	Merrimack Valley Planning Commission, Northern Middlesex Council of Governments
Berkshire County	2/24/15	Pittsfield	Berkshire Grown and Glywood	Berkshire Regional Planning Commission
Pioneer Valley	April 2015	TBD	PVGrows	PVPC/FRCOG

Project planners, under the leadership of PVPC and with direct assistance from MDAR, successfully executed two MFSP-sponsored Regional Forums (Southeastern and Northeastern MA) and two Listening Sessions (Boston and Central MA) all within the month of October 2014, as agreed upon with MDAR, with explicit purpose of preceding Food Day at the State House on October 24. Close to 200 people attended these sessions. Translation services were sought for the Southeast and Northeast Forums as these areas include a significant population of limited English speakers. In addition, venues were sought that ensured access by persons with disabilities and the elderly. The planning team facilitated these meetings starting with a presentation on key elements of our food system (existing conditions, issues, and challenges), then moving into a strengths, weaknesses, opportunities, and threats exercise to receive targeted feedback relevant to Plan. These forums were also designed to ensure that stakeholders have a better overall understanding of our food system and its fundamental importance to

Figure 1. Southeastern Massachusetts Regional Forum



the economic vitality of local production and food access for all residents.

Under the leadership of FRCOG, the planning team developed a matrix outlining input from all engagement activities held to date, including Regional Forums, Listening Sessions, and Advisor meetings. This matrix was presented at the November 2014 Advisor meeting to receive initial feedback regarding issues identified and recommendations made (included in the appendix).

MAPC created large project posters that included elaborate data analysis and maps of the food system emerging trends analysis (included in the appendix). Although these posters were not a specific deliverable, it became clear to the project team that portraying this data in an easily consumable visual representation was important to frame the discussions for the Regional Forums.

MDAR wished to feature reports from MFSP Regional Forum leaders Food Day, which would help to boost interest in the Plan. MAPC and the planning team assisted with Food Day event planning, particularly with regard to informing Legislators about the planning process by distributing a legislative briefing regarding the Plan and the Food Day event.

In addition, MAPC worked with MDAR to prepare talking points for the Governor to use during his keynote speech at the event. The event proved to be a great success, with a full house, participation of diverse constituents, and an opportunity to share our research and findings from engagement events with presentations and poster displays,

In order to ensure that adequate time is devoted toward outreach to farmers in Berkshire County and the Pioneer Valley (typically hard to reach during the growing season), two Western MA events will be held after December 2014 (during Phase II). The Berkshire Regional Forum is planned for February 24th in Pittsfield, and the Pioneer Valley Forum will happen in April.

The initial (Phase I) segment of the engagement program, as described above, also included the planning and scheduling of interviews with approximately 17 organizations (10 of which have been held as of early 2015, with 6 scheduled). These stakeholders represent organizations and groups focusing on land management, workforce development, and food access that have not been reached through the larger outreach events. The list of these outreach efforts is shown below. Others may be added in Phase II as needed.

Figure 2. Governor Patrick and Commissioner Watson at Food Day Proclamation



Table 3. Targeted Additional Outreach: Completed and Planned

Meetings or Events Completed in Phase I
Northeast Organic Farming Association
Salem State University Food Systems Planning Class
Worcester Food & Active Living Policy Council
North Quabbin Food Alliance
Massachusetts Farm Bureau, Annual Meeting
Food Solutions New England Massachusetts, Delegate Meeting
PVGrows Food System Job Creation Working Group Meeting
Massachusetts Farm to School Project
Massachusetts Maple Producers
Mass Development, Food Processing research
Meetings or Events Completed Scheduled in Phase II
Springfield Food Policy Council
UMass Amherst FARE and CPPA Colloquium
Massachusetts Partnership for Food Safety Education
The Food Project - Youth Engagement - Boston or Lawrence
CISA Annual Meeting
PV Grows Annual Gathering
Boston Food Resiliency Steering Committee

MAPC subcontracted with stakeholder engagement contractors that specialize in social justice-based engagement, Fertile Ground and the Boston Collaborative for Food and Fitness, to ensure that under-represented stakeholders were able to participate in the planning process. Under-represented groups include lower income, minority or non-English speakers, physically or mentally disabled, and immigrant farmers. The work performed by these contractors, commencing in December 2014 and ending in April 2015, will include the development of a creative, logical, and effective strategy to maximize the number of individuals engaged.

In addition to the Forums/Listening Sessions and interviews conducted or scheduled, MAPC and planning partners spoke at and/or staffed tables at a number of events to build awareness of the Massachusetts Food System Plan:

- Ag Day at the Statehouse
- Southeast MA Food Security Network (Quarterly Convening)
- Northeast Organic Farming Association (Summer Conference)
- Boston Local Food Festival 2014
- Lexington and Concord Food Policy Group Meeting
- Massachusetts Food Policy Alliance Meeting (December 2013)
- Food Solutions New England Summits/Meetings (4)
- Northeast Sustainable Agriculture (2 Seasonal Workshops)
- Coordination Meetings with the MA Food Policy Advisors (2)
- New England Food Policy Project Meetings and Webinars (8)
- New Hampshire Food Plan Strategy Meeting
- Vermont Farm to Plate Network Annual Meeting 2014
- Northeast Sustainable Agriculture Working Group Annual Meeting 2014
- Massachusetts Farm Bureau Annual Conference 2014

It is important to note that the interactive website (www.mafoodplan.org) previously mentioned as a communications tool has now been put into action to continue to engage stakeholders that could not/cannot attend a Forum, workshop, or meeting in person. The website provides the plan-building constituency with:

1. A place for stakeholders and the public to access plan drafts, meeting notices and agendas, and newsletters;
2. A central statewide forum and clearinghouse for information about food systems planning as well as a long-term portal for links to other existing resources such as neighboring states' food initiatives, land trusts, land matching databases, CISA, etc; and
3. Interactive features to gather public input on topical and geospatial aspects of the Food System Plan.

D. TASK 4. DATA RESEARCH, ANALYSIS AND MAPPING

Phase I data analysis and mapping efforts focused on discerning emerging trends and connectivity between issues and sectors within the food system to ensure that decisions made throughout the course of the project are informed and data-driven.

Due to the sheer magnitude and complexities of the statewide food system in Massachusetts, the planning team proceeded with this task on three parallel tracks, as listed below. Project Advisors, MDAR

and the MFPC were consulted each step of the way to ensure that the literature or data collected was relevant to the Massachusetts Food System.

1. Spatial analysis was conducted using Geographic Information Systems data to portray existing conditions within each of the food system sectors, as follows:
 - Consumerism;
 - Food System Employment;
 - Production: Available Land and Commodities;
 - Production on Land;
 - Production at Sea;
 - Food Processing Concentrations;
 - Retail and Wholesale Distribution;
 - Food Access, Security and Health; and
 - Food Waste and Nutrient Recovery
2. An extensive literature review was conducted to collect and analyze existing national, state, regional and local data and planning documents.
3. Academic partners helped to conduct discrete research projects to fill in gaps in data available to analyze the food system and prepare planning and policy recommendations.

SPATIAL ANALYSIS

MAPC completed a baseline trends analysis for each of the food system sectors using GIS software. During spatial analysis, the geographic scale of critical elements of a food system such as food production and consumption are shown as a key planning tool. This analysis includes the mapping of “flows” within food system sectors (e.g., layers of data that show food insecurity indicators overlain with food pantries) and across sectors (e.g., layers of data showing existing production overlain with data showing existing processing and new processing potential). Knowledge of flows of inputs is necessary to understand the consequences of the past, as well as characteristics of the current and future food system. Since GIS-based analysis is not intuitive to all stakeholders, we felt it important to list basic tasks associated with this work, as follows:

1. Conduct a baseline scan of existing spatial data available,
2. Develop a comprehensive list of data layers to be used (see appendix),
3. Consult with colleague food system spatial analysts (e.g., Vermont Food System Atlas mapping team),
4. Create a work plan for specific data layering and analysis per sector and across sectors,
5. Conduct first cut spatial analysis using GIS software,
6. Refine spatial analysis based on feedback from Advisors,
7. Determine products to be developed (e.g., online mapping, data tables, types of maps, posters or other materials), and
8. Create final products.

The data sources for the analyses can be found in the appendix, labeled “Data Layers Used”.

The following list provides examples of the specific GIS-based analysis conducted. The data analysis work plan and the data presentation given at the second Advisor meeting are included in the appendix to provide further details.

- a) Overlaying updated statewide demographic data and existing food retail locations (from InfoUSA) to identify existing food access issues across the Commonwealth;

- b) Mapping land use and preservation data over time to delineate areas where loss of farmland is most evident; and
- c) Combining statewide business and employment data to identify areas where education, training, and workforce development is critically needed in the food system.

In addition to the above analysis, MAPC's Data Services team created an online Food System Atlas, which can serve as an interactive mapping tool that is very easily useable by an beginner or average GIS user to understand the Massachusetts Food System. The map portrays all data collected and analyzed to date for each food system category. The interactive feature allows the user to portray the data layers in any way they desire, similar to how a user can use the Massachusetts GIS online viewer.

LITERATURE REVIEW

The planning team collected hundreds of reports, studies, white papers, articles, relevant legislation, etc., that would inform the planning process and fuel our work in developing planning and policy recommendations (inventory provided in the appendix). In addition, collecting and analyzing this information will be critical for developing a case analysis or "preamble" to the MFSP that describes the state of the food system in Massachusetts and external and internal forces impacting the system (to be developed in Phase II). Project Advisors received the literature review inventory in July 2014 to provide feedback on reports that were potentially missing. Thus far, the planning team has reviewed and analyzed approximately 25 national and state reports and food system plans that, upon first glance, were found to potentially include the most relevant findings and recommendations. Notes and summaries of the literature review are included in the appendix.

During Phase II, the planning team will continue to review the literature collected and share relevant findings or highlights with the Advisors and Working Groups to help develop an outline of policy and planning recommendations relevant to the Plan. In addition, the planning team will use information collected from public outreach and engagement efforts, as well as consultations with the MFPC, to understand critical gaps and needs in data availability, analysis, and mapping.

RESEARCH

Funding for MAPC as a facilitating entity for this project was \$35,000 less than had been budgeted in the proposal, requiring the planning team to identify alternative resources to conduct some of its work. Specifically, it drew on the contributions of Advisors and academic institutions to increase the research capacity for the project. The Project Team reached out to Advisors in June requesting input to help to collect and analyze data, and to review existing research. Some Advisors offered contact information and literature for the planning team to review. Beyond this, MAPC sought in-kind services from two interested Tufts University professors, and issued a Request for Information for additional assistance from other academic institutions. MAPC worked closely with several Advisors to shape the Tufts proposal and select other research projects, as listed below. The selected projects are those that will be most helpful in generating the Food System Plan and its public policy recommendations. These reports were completed in December, and are included in the appendix.

1. Tufts Urban Environmental Planning Department: "Local Food as Exclusionary/Inclusionary"
2. Tufts Friedman School of Nutrition Science and Policy:
 - a. "Massachusetts Food Insecurity: Landscape and Innovations"
 - b. "Understanding Climate Change Impacts on Food Production"

3. UMass Amherst: “Employment in the Food System: Strategies for Improving Wages and Living Conditions for Farm Laborers in Massachusetts”

MAPC also secured pro-bono services from Dr. Kathryn Brodowski, UMass Medical Physician, regarding the development of a statewide food insecurity screening system for patients, as well as a draft model for clinic-based programs. The model was crafted from research on two existing programs at the Boston Medical Center and the Holyoke Medical Clinic, where clinician screening, nutrition education, and food distribution services were provided. Dr. Brodowski is currently creating a draft model and findings document that describes the potential replication of these types of programs at Medical Centers in numerous Gateway Cities, which will be completed in February 2015.

Under the leadership of the Massachusetts Workforce Alliance, the planning team has also conducted research on workforce development within the Food System to ensure that strengthening and growing the food system happens in tandem with worker preparation and skill development. Data collected includes programming through community colleges and higher education institutions, non-profit and professional organizations, public and vocational technical schools, agriculturally oriented summer camp programming and apprenticeship training, and incubator farms and community farms. This information has helped the team to create an education and training inventory that will be used to conduct the gap analysis with Working Groups and key workforce development informants during Phase II (included in appendix).

4. PHASE II: AT A GLANCE

The second Phase of the MFSP project begins in January 2015. In order to ensure a seamless transition between the two Phases, MDAR and MAPC amended the existing Phase I contract and scope, which allows the work to continue to move forward. As previously mentioned, Phase II will include the continuation of some tasks assigned to the Phase I scope and budget such as project management, Advisor and Working Group coordination, stakeholder engagement, and research. Key areas of work that will be included in Phase II are listed below.

1. Project Management: Continuation of administrative, fiduciary, communications, and planning team management by MAPC.
2. Advisor and Working Groups: MAPC, with assistance from the planning team, will continue to coordinate and convene Project Advisors and the Executive Committee. Facilitation and administrative assistance will be provided to Working Group Leads for meetings and development of specific findings, goals, and recommendations in each food sector.
3. Stakeholder Engagement: As previously mentioned, PVPC will lead the team in implementing two Western Massachusetts Regional Forums, and continuing to conduct key stakeholder group interviews. MAPC will lead in the maintenance of the interactive planning webpage and development of outreach materials such as posters, flyers/postcards, banners to bring to events the planning team will attend.
4. Planning and Policy Recommendations: Local, regional, state and federal planning and policy recommendations will be geared toward strengthening Massachusetts' local food system. Opportunities and challenges (barriers) to implementing these policies will be identified.
5. Progress Benchmarks / Metrics: A set of quantitative benchmarks and/or metrics will be developed, first to measure progress during the planning process, and more importantly, to provide a framework for assessing progress in reaching outcomes and objectives of the Food System Plan.
6. Development of the Massachusetts Food System Plan: The Plan's primary function will be to provide a blueprint for strengthening our statewide food system. It will be accessible to many different audiences, including the lay person, and individuals working in food system related sectors. The Plan will also be relevant and scalable to regional planning agencies and municipalities. Proposed primary sections of the Food System Plan include:
 1. Executive Summary;
 2. Preamble summarizing external (regional, national) and internal (in-state) conditions that affect the Massachusetts food system;
 3. Summary of stakeholder engagement process (including public meetings, interviews, and other outreach efforts), results of this process, and lessons learned, along with a summary of other elements of the planning process, including an assessment of benchmarks achieved during that process;
 4. Overview of the current status (existing conditions) of the Massachusetts food system, major findings of the research and data analysis (including the gap analysis on workforce issues), identification of challenges within Massachusetts food system, and major opportunities for positive change within the system;
 5. Goals and objectives to be achieved by implementation of the MFSP; planning and policy recommendations (short and long-term), which will help to achieve those goals; along with assets and resources that could help to achieve these recommendations; measurements and indicators to serve as success metrics for the Plan; and

6. Strategic action plan to achieve these planning and policy recommendations (short and long-term) that includes specific actions that participants in the planning process and stakeholders should undertake, proposed timeframes for this work, potential funding sources, and recommendations for additional research and partnerships needed.

5. SUMMARY

Phase I of the Massachusetts Food System Planning Project has built a solid foundation for the drafting and adoption of a Plan in Phase II. Nearly all Phase I tasks have been completed, with a few outreach and engagement events continuing into Phase II as noted earlier. The Phase II budget addresses the \$35,000 budget deficit with a foundation for food systems mapping rather than a more complex and costly approach, as well as postponing the academic conference. Both can be addressed if additional funding becomes available.

The Project Team is dedicated to this project and its successful outcome. As professional planners, we are well aware of the budget constraints for the project and have requested funding within the confines of the grant, as shown in the tables below. It should also be noted that there has been a strong commitment from MAPC and all the partners to support this project, as demonstrated by the budget match.

Table 4. Phase I Budget

	MAPC	FRCOG	PVPC	MWA	Contractors	TOTAL
LABOR	\$149,256.00	\$31,000.00	\$39,000.00	\$14,700.00	\$36,400.00	\$270,356.00
SUBTOTAL	\$157,756.00	\$38,649.00	\$44,750.00	\$18,700.00	\$36,400.00	\$296,605.00
TOTAL GRANT	\$77,000.00	\$30,550.00	\$32,500.00	\$14,700.00	\$36,400.00	\$191,150.00
TOTAL MATCH	\$33,434.21	\$10,387.00	\$14,111.84	\$0.00	\$0.00	\$57,933.05
ADDITIONAL MAPC MATCH	\$35,000.00					\$35,000.00
EXPENSES	\$8,500.00	\$7,649.00	\$5,750.00	\$4,000.00		\$25,899.00
TOTAL PROJECT	\$153,934.21	\$48,586.00	\$52,361.84	\$18,700.00	\$36,400.00	\$309,982.05
Proposal	\$85,100.00	\$30,550.00	\$32,500.00	\$14,700.00	\$28,300.00	\$191,150.00
Award Adjustment	-\$8,100.00	\$0.00	\$0.00	\$0.00	\$8,100	\$0.00
Percent Adjustment	-10%	0%	0%	78%	30%	

Table 5. Initial Estimated Project Timeline

		2014										2015									
Tasks		Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct
Phase I Activities																					
1a	Project Management																				
1b	Finalize Contracts, Budget, Schedule, and Work Plan																				
2a	Project Advisor Meetings																				
2b	Working Group / Task Force Meetings																				
3	Constituency Building Stakeholder Engagement																				
4	Data research, analysis, and mapping																				
Phase II Activities																					
5	Develop metrics and progress benchmarks																				
6	Develop policy recommendations																				
7a	Plan development																				
7b	Plan production																				

APPENDICES LIST

Following is the list of appendix documents. These are available in separate document files.

Proposed amended full project scope and budget (drafted June 2014).

1. Massachusetts Food System Plan Contract: Amendment 1, Attachment A: Full Project Scope of Services
2. Massachusetts Food System Plan Contract: Amendment 1, Attachment B: Full Project Budget

Communications plan

3. Communications Plan: MA Food System Plan

Branding materials

4. Project Logo
5. Tri-fold Brochure
6. Postcard

Example project inquiry

7. Email from Amanda Leetch, Nuestro Huerto Urban Farm, 11/06/14

Project Advisors

8. Project Advisor List, revised 02/09/15

Stakeholder Engagement Work Plan

9. Stakeholder Engagement Work Plan & Schedule, Phase I

Advisor/Forum Feedback Matrix (initial issues, opportunities, and recommendations)

10. Stakeholder Input to Date 10-31-14

Spatial data posters

11. Food Matters to People
12. Food Matters to the Economy
13. Production: Land Commodities
14. Production: Ocean Commodities
15. Processing
16. Distribution
17. Food Access, Security & Health
18. Food Waste & Nutrient Recovery

Data analysis presentation

19. Massachusetts Food Plan: Baseline Trends

Literature review inventory

20. In-State Food-Related Literature Review

Academic research reports

21. Climate Change and Cranberry Cultivation in Massachusetts
22. Climate Change Adaptation and Mitigation Recommendations for Massachusetts Dairy Producers
23. Massachusetts Marine Fishing and Climate Change
24. Climate Change and the Maple Syrup Industry in Massachusetts
25. Pest Management Adaptation for Specialty Crops in the Face of Climate Change
26. Inclusive Local: Studies and Recommendations for More Equitable Local Food Retail in Massachusetts
27. Massachusetts Food Insecurity: Landscape and Innovation

Draft Economic and Workforce Gap Analysis

28. Massachusetts Food Economy and Workforce Report, Part 1, Preliminary Draft, Food System Businesses: Summary Data
29. Massachusetts Food Economy and Workforce Report, Part 2, Preliminary Draft, Food System Businesses: Detailed Data by Sector
30. Massachusetts Food Economy and Workforce Report, Part 3, Preliminary Draft, Food System Workforce
31. Massachusetts Food Economy and Workforce Report, Part 4, Preliminary Draft, Food System Education and Training Resources

Data

32. Data Layers Used